

DOCUMENT RESUME

ED 054 554

EC 033 174

TITLE

Summary of Selected Characteristics of Hearing Impaired Students, United States: 1969-70.

INSTITUTION

Gallaudet Coll., Washington, D.C. Office of Demographic Studies.

PUB DATE

Jun 71

NOTE

42p.

AVAILABLE FROM

Gallaudet College Book Store, Washington, D.C. 20002 (\$1.00)

EDRS PRICE

MF-\$0.65 HC-\$3.29

DESCRIPTORS

*Aurally Handicapped; Demography; *Educational Programs; *Enrollment Trends; *Exceptional Child Research; *Incidence; National Surveys; Statistical Data

ABSTRACT

A survey of hearing impaired children and youth in the United States for the school year 1969-70 was conducted. One dimensional summaries of selected characteristics for 32,285 students enrolled in participating special education programs for the hearing impaired were presented. Discussion of data highlights was followed by detailed tables that describe the following variables: number and percentage distribution of students enrolled in participating special educational programs for the hearing impaired by states, age, hearing threshold levels, age at onset of hearing loss, age hearing loss discovered, history of parental deafness before age six, hearing aid use, and age started formal education prior to age six; and among students enrolled in participating special educational programs for the hearing impaired, the number and rate per 1,000 students of additional handicapping conditions and probable causes of hearing loss. Appended are a description at the annual survey, basic data and preschool data forms used, and a list of programs participating in the annual survey. (CB)

7CC6C0M7

EC 033 / 74 E

This research was supported by a grant from the Office of Education, U.S. Department of Health, Education & Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgement in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.



OFFICE OF DEMOGRAPHIC STUDIES
Publication — Series D — Number 5

*For Sale by Gallaudet College Book Store
Washington, D.C. 20002 — Price One Dollar*

LIBRARY OF CONGRESS

CATALOG CARD NUMBER 74-98885

U.S. DEPARTMENT OF HEALTH, EDUCATION
& WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED
EXACTLY AS RECEIVED FROM THE PERSON OR
ORGANIZATION ORIGINATING IT. POINTS OF
VIEW OR OPINIONS STATED DO NOT NECES-
SARILY REPRESENT OFFICIAL OFFICE OF EDU-
CATION POSITION OR POLICY

SERIES D
NUMBER 5

**DATA FROM THE
ANNUAL SURVEY OF HEARING
IMPAIRED CHILDREN AND YOUTH**

**SUMMARY OF
SELECTED CHARACTERISTICS
OF HEARING IMPAIRED
STUDENTS**

UNITED STATES: 1969-70

Additional handicapping conditions, age at onset of hearing loss, age loss discovered, probable cause of hearing loss, parental history of deafness, age started education prior to age six, hearing aid use, hearing threshold levels, age and sex distributions for approximately 35,000 students enrolled in participating special educational programs for the hearing impaired during the 1969 - 70 school year.

OFFICE OF DEMOGRAPHIC STUDIES
GALLAUDET COLLEGE

Washington, D.C.

June 1971

GALLAUDET COLLEGE

Edward C. Merrill, Jr., Ph.D., *President*
John S. Schuchman, Ph.D., *Dean*

OFFICE OF DEMOGRAPHIC STUDIES

Augustine Gentile, *Director*
Peter Ries, *Acting Deputy Director*

SENIOR STAFF MEMBERS

Sal DiFrancesca, Ph.D., *Research Psychologist*
Neil Murphy, *Statistical Analyst*
Brenda Rawlings, *Statistical Analyst*
Patricia Voneiff, *Statistical Analyst*
Sally Wagner, *Administrative Assistant*

TABLE OF CONTENTS

	PAGE
Acknowledgements	iv
Introduction	1
Sources of the Data	1
Data Collection Forms	1
Qualifications and Limitations of the Data	2
Discussion of the Data	3
Summary	8
 Detailed Tables	
Table 1: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by States: United States, 1969-70 School Year	12
Table 2: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age: United States, 1969-70 School Year	13
Table 3: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Hearing Threshold Levels: United States, 1969-70 School Year	14
Table 4: Number and Rate Per 1,000 Students, of Additional Handicapping Conditions Among Students Enrolled in Participating Special Educational Programs for the Hearing Impaired: United States, 1969-70 School Year	15
Table 5: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age at Onset of Hearing Loss: United States, 1969-70 School Year	16
Table 6: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age Hearing Loss Discovered: United States, 1969-70 School Year	16
Table 7: Number and Rate Per 1,000 Students, of Probable Causes of Hearing Loss Among Students Enrolled in Participating Special Educational Programs for the Hearing Impaired: United States, 1969-70 School Year	17
Table 8: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by History of Parental Deafness Before Age Six: United States, 1969-70 School Year	18
Table 9: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Hearing Aid Use: United States, 1969-70 School Year	19
Table 10: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age Started Formal Education Prior to Age Six: United States, 1969-70 School Year	19
 Appendices	
Appendix I: Description of the Annual Survey of Hearing Impaired Children and Youth	22
Appendix II: Basic Data Form Used in the Annual Survey for the 1969-70 School Year	25
Appendix III: Preschool Data Form Used in the Annual Survey for the 1969-70 School Year	27
Appendix IV: Programs Participating in the Annual Survey of Hearing Impaired Children and Youth	29

Acknowledgements

As the Annual Survey of Hearing Impaired Children and Youth enters its second year of data publications, we again want to thank the many people whose interest and energies have made and continue to make the Survey possible. We thank those at the participating schools and classes who prepared the survey data forms. We are hopeful we have made their efforts worthwhile and that they will find the information in the reports useful.

We also extend our appreciation to the National Advisory Committee. Their advice and assistance have been of great benefit to us in all areas of the program. The committee members are listed below.

National Advisory Committee

Kenneth R. Mangan, Ed.D. *Chairman*

Thomas R. Behrens, Ph.D.
Nona L. Burrows
Edward Carney
David M. Denton
Albert W. Douglas
George W. Fellendorf
Robert Frisina, Ph.D.
Barry L. Griffing
John D. Harrington, Ph.D.
Lloyd A. Harrison
Marshall S. Hester, Ph.D.
Robert T. Kennedy
James A. Little
William McClure, Ph.D.
Freeman McConnell, Ph.D.
June Miller, Ed.D.
Lawrence Murphy, Rev.
Walter E. Nance, M.D., Ph.D.
Jerome Schein, Ph.D.
Frederick C. Schreiber
Roy Stelle, Litt. D.
William C. Stokoe, Jr., Ph.D.
Armin G. Turechek, Ph.D.
Geno Vescovi, Ph.D.

Finally, we wish to acknowledge the efforts of the entire staff of the Office of Demographic Studies for their work not only in preparing the publications but in all aspects of the Annual Survey.

Brenda Rawlings
Augustine Gentile
Washington, D.C.
June, 1971

Summary of Selected Characteristics of Hearing Impaired Students United States: 1969-70

Brenda Rawlings

INTRODUCTION

This report presents summary data on approximately 35,000 students enrolled in educational programs for the hearing impaired in the United States during the 1969-70 school year. A large body of data has been collected on these students and will be presented in a series of publications. The objective of this report is to provide as soon as possible a summary of the data which have been tabulated to date. Future reports will contain data showing significant relationships between variables included in this publication and also present other characteristics of the students.

The variables described in this report include: additional handicapping conditions, age at onset of hearing loss, age hearing loss discovered, probable cause of hearing loss, age at which the student started his education prior to age six, parental history of deafness and hearing aid use. Data on age, sex and audiometric findings (better ear averages) are considered basic demographic characteristics relevant to this population and will be included in all reports.

The information was collected by the Annual Survey of Hearing Impaired Children and Youth, a continuing program which began operations May 1968. The program is aimed at improving educational opportunities for the hearing impaired by collecting and disseminating useful information pertinent to this group. The Office of Demographic Studies at Gallaudet College conducts the Survey. The major

share of funding is provided by the Division of Research, Bureau of Education for the Handicapped, Office of Education, Department of Health, Education and Welfare. Further details about the Annual Survey program may be found in Appendix I.

SOURCES OF THE DATA

For the 1969-70 school year, all educational programs for the hearing impaired known to the Survey Office were invited to participate in the Annual Survey. In all, 570 educational programs (reporting sources) were contacted and approximately 76 percent of these participated in the Survey for the 1969-70 school year. A total of 35,285 individual records were received. This constitutes 80 percent of the estimated student enrollment in the programs asked to participate. The programs that participated during the 1969-70 school year from which the data in this report were obtained are listed in Appendix IV.

DATA COLLECTION FORMS

The basic survey forms used in gathering data for the 1969-70 school year appear in Appendices II and III. An abbreviated version of the Basic Data Form (ACHIC-2) was sent to those reporting sources which participated during the 1968-69 school year. These forms were used to determine if students

reported on the previous year were still in the same program. If so, data that were obtained the previous year were not requested again. All items included on the forms were selected on the basis of recommendations made by the National Advisory Committee.

The Basic Data Form for children over six (ACHIC-2) was used to collect data on students six years old and over who had never been reported to the Survey Office before. This included those students at schools which had not participated in the Survey and new students at schools which had participated the year before. See Appendix II.

For children under age six or who would become six years of age after December 31, 1969, ACHIC-4 was used. This form appears in Appendix III. It is similar to the Basic Data Form except for the sections on Educational Program and Educational History. This is due to the fact that types of preschool educational training vary widely and are distinct from the types of programs being attended by older children. Therefore, it was felt necessary to ask different questions regarding educational programs for preschool-age children and children six years of age and over.

QUALIFICATIONS AND LIMITATIONS OF THE DATA

In order to interpret and to use correctly the information presented in this report, it is important to take into consideration some general qualifications and limitations of these data.

As previously mentioned, records were obtained for 35,285 students. Based primarily on information available in *American Annals of the Deaf*¹, the students for whom data were obtained represent about 80 percent of all students in schools and classes for the hearing impaired. However, with respect to itinerant special educational programs, data were obtained on about 4,000 students. It is estimated that this number represents only about one third of all such students.

For some of the questionnaire items the information requested was not available or unknown. For items where the information was not reported for a large percentage of the students, it is difficult to know the true distribution of the data. Table A shows the proportion of records for which information for particular items was not reported or was unusable.

¹ *Directory of Services for the Deaf in the United States: American Annals of the Deaf*, 1970 Edition, McCay Vernon, Editor.

TABLE A: Percentage of records for which data for selected items were not reported or were not usable: United States, 1969-70 school year

Item	Percent of Records for Which Data Were Not Reported or Were Not Usable
Age ¹	0.0
Sex ¹	0.0
Better ear average ²	25.3
Hearing aid use	19.5
Age at onset of hearing loss	19.3
Age hearing loss discovered	52.6
Probable cause of hearing loss	54.2
Additional handicapping conditions	17.4
Age started formal education prior to age six	23.8
History of parental deafness	37.7

¹ Data for these items were edited.

² Only 5 percent of the records did not report some audiological results.

Information on age and sex was submitted for most students. When the information for these items was missing, it was obtained by correspondence with the reporting source. In a few cases it was necessary to estimate the age and determine the sex of the student utilizing other information on the records, e.g., the number of years in school and the name of the student.

Data on better ear averages shown in this report were determined by averaging the puretone threshold levels for the better ear at the frequencies of 500, 1000 and 2000 cycles per second. Table A shows that this information was not available for about 25 percent of the students. Of this number only about 5 percent of the forms actually did not report any audiological results. The remaining 20 percent contained audiological information, but did not give results for one or more of the frequencies used to compute the better ear average. Of those students asked the question on hearing aid use, the information was not available or unknown for 20 percent.

Data on age at onset of hearing loss were not available for 19.3 percent of the records. The age that the hearing loss was discovered was not reported on 52.6 percent of the records. It is uncertain at this time whether information on age at discovery and age of onset was not collected by the reporting sources or whether the information was not known by the parents or medical examiner providing the reporting source with its data.

Information on the etiology or cause of the student's hearing loss was not reported for 54 percent of the students. In addition to providing check boxes on the questionnaire for specific causes, a box was provided for the respondent to record if there was "No Known Cause" for the hearing loss. This box was checked for 23 percent of the students. This question was either blank or the "Data Not Available" box was marked for 31 percent of the students. It is possible that some respondents may have checked the "No Known Cause" box, however, to indicate that the reporting source did not have the information rather than there was no known medical cause for the hearing loss.

Information on additional handicapping conditions was not reported for about 17 percent of the students. Excluding the edited variables, the rate of non-reporting for this item was the lowest for the variables presented in this report.

The age of students when they first began their formal education prior to age six was not available for 24 percent of the records. The rate of non-reporting for items relative to parental history of deafness prior to age six was 38 percent.

Because of the importance of reducing the rates of non-reporting, the Survey has adopted procedures designed to obtain missing information. On the basis of results to date, it is expected that non-reporting rates of unavailable data will be lower in coming years.

Efforts also are being undertaken by the Survey Office to utilize more of the data that are reported. For example, in the case of better ear averages, 20 percent of the records reported some audiological information but not enough to compute a better ear average. Evaluation is now being done on this 20 percent to be able to describe the hearing loss with the information that has been supplied and therefore reduce this large percentage of unusable data.

DISCUSSION OF THE DATA

In the series of tables which follow, summaries are presented for some of the data collected on 35,285 students enrolled in participating special educational programs for the hearing impaired. A description of the characteristics presented in the tables and highlights of the data are discussed here.

States

As mentioned previously, all special educational programs for the hearing impaired known to the Survey Office were contacted and invited to participate in the Annual Survey. Data were collected from forty-nine states and the District of Columbia. Table 1 presents a distribution of the records received from these states. It must be emphasized here that these data represent only the enrollment in those programs participating in the Annual Survey. They do not indicate the total number or distribution of hearing impaired students enrolled in special educational programs or the number of hearing impaired children in any state.

A special survey is now under way that is designed to provide estimates of the total number of children in special educational programs in each state. Therefore, in a later publication we will be able to relate participation in the Annual Survey to the actual enrollment in each state.

Sex and Age

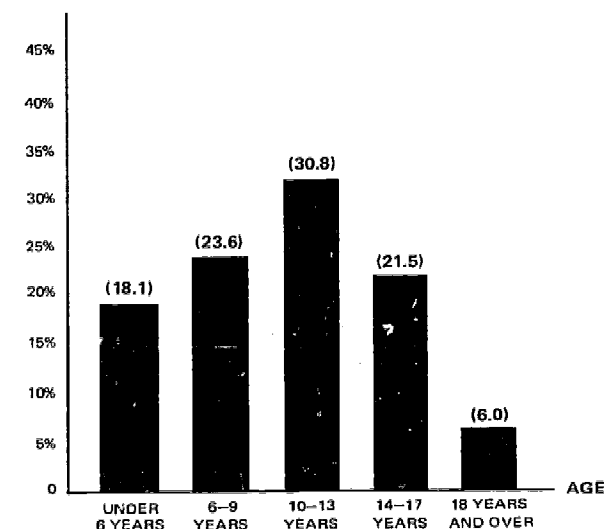
The sex distribution of the students for whom data were obtained is shown in Table B. Fifty-four percent of the students were males and forty-six percent females. This distribution is almost identical to that reported in the 1968-69 Annual Survey data, and similar to the sex ratios for hearing impaired students in special educational programs reported in other studies.

TABLE B: Number and percentage distribution of students enrolled in participating special educational programs for the hearing impaired by sex: United States, 1969-70 school year

Sex	Number	Percent
Total	35,285	100.0
Males	19,082	54.1
Females	16,203	45.9

Age is defined in this report as the chronological age of the student as of December 31, 1969. Chart 1 presents in broad age groups a graphic representation of the age distribution of the 35,285 students on whom data were collected. A little more than 18 percent of the students were under 6 years of age. About 24 percent were in the age group from 6 to 9 years; about 31 percent were from 10 to 13 years; 22 percent were from 14 to 17 years and 6 percent were 18 years and over.

CHART 1: Percentage distribution by age of students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year



As seen in detailed Table 2, however, by single years the greatest number of students were age 5, (3,478) accounting for more than half of the children under six. Five year old students accounted for approximately 10 percent of all the students. It is also worth noting that the number of 6 year olds (1,766) is only about half of the number of 5 year olds. These data also show a relatively higher proportion of children from 9-11 years of age. The larger number of students at age 5, and 9 through 11 reflect the rubella epidemic of 1964 and also an earlier outbreak that occurred during the late fifties.

Hearing Threshold Levels

A distribution of the hearing threshold levels (better ear averages) of the students is shown in detailed Table 3. As previously stated, the better ear averages were determined from averaging puretone thresholds for the speech range (500, 1000 and 2000 Hz) in the better ear. Better ear averages are given in

decibels according to the ISO¹ standard. For the purposes of this report, audiological data reported in ASA² standard were converted to the ISO standard by adding ten decibels to the ASA average. The data had to be converted from the ASA standard to the ISO standard for about 13 percent of the students. In all, data were available to compute better ear averages for 26,355 students.

In Table 3 you will note the category "Unable to Compute." This refers to approximately 20 percent of the students for whom better ear averages could not be determined due to the omission of results for one or more of the frequencies used to compute the average. However, no audiological information at all was supplied on 5 percent of the records.

Table C and Chart 2 show the distribution of hearing losses excluding students for whom data were not reported or were not usable. The largest percentage of students had better ear averages of 85 dB and above. This group accounted for almost one half of the students.

There were 518 students (2.0 percent) whose better ear averages were under 15 decibels. Our data show that these are mostly students with a severe loss in the worse ear.

¹ International Organization for Standardization

² American Standard Association

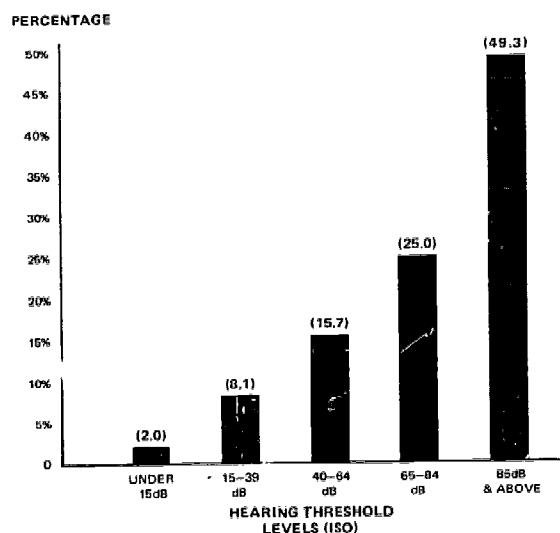
TABLE C: Number and percent distribution, by hearing threshold levels, of students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year

Hearing Threshold Levels in Decibels (ISO) ¹	Number of Students ²	Percent
All dB levels	26,355	100.0
Under 15 dB	518	2.0
15-39 dB	2,130	8.1
40-64 dB	4,140	15.7
65-84 dB	6,587	25.0
85 dB & above	12,980	49.3

¹ Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

² Excludes those for whom data were not reported or the data were not usable.

CHART 2: Percentage distribution by hearing threshold levels of students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year¹



¹Excludes those for whom data were not reported or the data were not usable.

Additional Handicapping Conditions

Data describing handicaps the students had in addition to impaired hearing are shown in Table 4. This table shows the number of times the particular conditions were reported. For some students more than one additional handicapping condition was reported. If a particular child had both a "Severe Visual" problem and "Emotional Problems," his condition would be counted in both categories. As an example, the total column for a specific condition such as "Severe Visual" indicates the number of different students reported to have the condition. Detailed Table 4 also indicates the number of times the particular conditions were the only additional handicap and the number of times the condition was reported in combination with another condition.

Also shown in Table 4 are the rates of occurrence of the additional handicapping conditions. These are expressed as the total number of conditions per 1,000 students. These computations are based on all students (including those reported as having no additional handicapping conditions) for whom information was received. Excluded from the computations are the 6,154 students for whom no data were obtained for this item.

The condition reported most frequently was that of mental retardation. The rate of occurrence for this condition was 71.5 cases per 1,000 students.

Sixty-one students per 1,000 were reported to have educationally significant behavioral problems in addition to their hearing impairment, and 68 per 1,000 were reported to have emotional problems.

TABLE D: Number and rate of additional handicapping conditions among hearing impaired students enrolled in participating special educational programs: United States, 1969-70 school year

Number of Additional Handicapping Conditions Reported	Number	Percent
Total Number Students	35,285	100.0
No additional handicapping conditions	19,698	55.8
One additional handicapping condition	7,027	19.9
Two or more additional handicapping conditions	2,406	6.8
Not reported	6,154	17.4

As seen in Table D, 56 percent of the students had no additional handicapping conditions. Only 20 percent had one additional handicap and 7 percent had two or more handicaps in addition to the hearing impairment. If the 17 percent for whom this information was not available are omitted, the percentages would be as follows:

No additional handicapping conditions	67.6%
One additional handicapping condition	24.1%
Two or more additional conditions	8.3%

The questionnaire item regarding additional handicapping conditions (See Appendices II & III) provided "check boxes" for reporting selected conditions and provided space to write in other conditions. Some of the more frequently appearing "write-in" responses were "brain damage," "heart disorders" and "orthopedic disorders." The category "Learning Disabilities" includes a variety of responses that were written in such as "learning disability," "slow learner," "aphasic," "reading problems," etc.

It should be noted further that reported conditions such as "Emotional Problems" and "Behavioral Problems" are frequently based on subjective judgments, whereas the diagnoses for other types of handicapping conditions are usually based on physiological, psychometric, and other evidence.

Age At Onset And Age Loss Discovered

Tables 5 and 6 present data for the age at onset of hearing loss and the age at which the hearing loss was discovered. As can be seen, the probable age at onset was known for 81 percent of the students while information was available for only 47 percent of the students regarding the age the loss was discovered.

Age as used in these tables is defined in full years. Therefore, children whose ages at onset are reported as two years of age includes those reported onsets at 24 to 35 months.

Text Tables E and F summarize the data collected on these variables. For 63 percent of the students the age at onset of hearing loss was at birth. Seventy-five percent reported the onset either at birth or under 3 years. Only one percent, however, reported the age of discovery to be at birth and only about 30 percent reported the age of discovery as under 3 years. Later tabulations of these data will provide a better opportunity to analyze the relationship between onset of loss and discovery. However, as indicated in Table G when the percentages are based on only those students for whom data were obtained, the lag between onset and discovery is not as great.

TABLE E: Number and percent distribution, by age at onset of hearing loss, for students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year

Age at Onset of Hearing Loss	Number	Percent
<u>Total Students</u>	<u>35,285</u>	<u>100.0</u>
Onset at birth	22,102	62.6
Under 3 years	4,268	12.1
3-6 years	1,591	4.5
7 years and over	528	1.5
Unknown or not reported	6,796	19.3

TABLE F: Number and percent distribution, by age hearing loss discovered, for students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year

Age Hearing Loss Discovered	Number	Percent
<u>Total Students</u>	<u>35,285</u>	<u>100.0</u>
Discovered at birth	191	.5
Under 3 years	10,539	29.9
3-6 years	4,716	13.4
7 years and over	1,279	3.6
Unknown or not reported	18,560	52.6

TABLE G: Percentage distribution by age at onset of hearing loss and age loss discovered for students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year

Age in Years	Age at Onset	Age Loss Discovered
<u>Total</u>	<u>100.0¹</u>	<u>100.0²</u>
At birth	77.6	1.1
Under 3	15.0	63.0
3-6	5.6	28.2
7 & over	1.9	7.6

¹Omitted from the computation are the 6,796 students for whom age at onset was not reported.

²Omitted from the computation are the 18,560 students for whom the age the loss was discovered was not reported.

Probable Cause of Hearing Loss

Information on the probable cause of the student's hearing loss was requested on all students. As previously mentioned, the rate of non-reporting for this item was 31 percent. "Check boxes" were provided for this item as well as a space for the

respondent to write in a cause. Table 7 presents data for the number of times particular causes were attributed for the hearing loss. If the loss was attributed to two or more causes, each cause was counted. Text Table H indicates, however, that for 42 percent of all the students only a single cause was reported. If the 19,110 students for whom the data were not reported are excluded from the computations, a single cause for the hearing loss was reported for 93 percent of the students.

TABLE H: Number and percentage distribution, by cause of hearing loss of those students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year

Probable Cause of Hearing Loss	Number	Percent
Total Students	35,285	100.0
Single cause reported for hearing loss	14,970	42.4
Onset at birth	9,829	27.9
Onset after birth	5,141	14.5
Multiple cause reported for hearing loss	1,205	3.4
Onset at birth	800*	2.3*
Onset after birth	405*	1.1*
No known cause	8,038	22.8
Not reported	11,072	31.4

* These distributions are estimated.

As previously mentioned in the section Qualifications and Limitations of the Data, the "check boxes" for No Known Cause and Data Not Available may have been used interchangeably by various respondents. The "No Known Cause" box was checked for over 8,000 students.

The detailed table also presents the rate of occurrence of the various causes. These are expressed as the total incidence of causes per 1,000 students. These computations are based on all students for

whom information was received, but exclude the 19,110 students for whom the data were not available or not reported. For the 19,110 students it is believed a large percentage of these had hearing losses at birth.

Of all the known causes, maternal rubella was the most frequently reported cause. The rate of occurrence was 267 per thousand (4,321 students). Hereditary factors were attributed to the loss of hearing for 2,390 students or a rate of 147.8 students per thousand. For cases where the cause was reported as occurring after birth, meningitis was reported more frequently than any other specific cause. It was reported as a cause for 1,677 students.

There were 2,003 write-in responses for causes of hearing loss with onset after birth. A large percentage of these were reported as "high fever" and "infections."

History of Parental Deafness Prior to Age Six

Included in the data form section "History of Hearing Loss" were questions related to family history of hearing loss. The respondent was asked if the student's parents had normal hearing or a hearing loss before age six. This question was asked about both the child's father and mother. Data regarding parental hearing losses prior to age six are shown in Table 8. The large proportion (38 percent) of students for whom this information was not reported should be noted. For 55 percent of the students both parents had normal hearing and a little over 5 percent reported that at least one parent suffered a hearing loss prior to age six.

However, when the 13,295 students for whom the information on both parents was unknown are omitted from the computation, the following percentage distribution is obtained:

Both Parents Normal Hearing	88.2 %
Both Parents with Loss	4.0 %
One Parent with Loss	4.6 %
One Parent Normal, Information on	
Other Parent Not Reported	3.3 %

It should be noted that the data in Table 8 refer to the number of students. There were 1,889 students who had at least one parent with a hearing loss prior to age six. Of this number there were 869 students whose mother and father had a loss and therefore the total number of parents with a hearing loss is 2,758.

Hearing Aid Use

During the 1969-70 school year, the section "Hearing Aid Use" appeared only on the data

collection form for children under six years of age (ACHIC-4). This variable, however, was collected and coded on all students for the 1968-69 school year. Therefore, where this information was available for a student six years of age or older who was reported to the Survey again during the 1969-70 school year, it has been included in the tables. The total number of students for whom this question was asked either during the first year of data collection or the second year accounts for 29,654 students. Of this number, 19 percent of the records did not report information or the information was unknown.

As seen in Table I of those asked the question, 54 percent used a personal aid. As noted in the directions for completing the form, "use" is defined here as meaning the student wears the aid at least one hour per day. This question may have been interpreted differently, however, by various respondents. These 54 percent who use an aid may not use their aid regularly.

TABLE I: Number and percent distribution, by hearing aid use, of students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year

Hearing Aid Use	Number	Percent
Total Students Asked Question	29,654	100.0
Student does not use personal aid	7,831	26.4
Student uses personal aid	16,045	54.1
Unknown or not reported	5,778	19.5

Age Started Education Prior To Age Six

The "Educational History" section sought information on the age the student started his formal educational training prior to age six. Table 10 indicates this information was not reported for 24 percent of the students. When these 8,397 students for whom the data were not available are excluded from the base population, it is found that 70 percent of the students received some education prior to age six, of whom 11 percent started their education prior to age three.

TABLE J: Number and percent distribution, by age started education prior to age six, of students enrolled in participating special educational programs for the hearing impaired: United States, 1969-70 school year

Age Started Education Prior to Age Six	Number ¹	Percent
Total Students	26,888	100.0
Under 3 years of age	3,021	11.2
3-5 years of age	14,276	53.1
Some education, but age started unknown	1,580	5.9
No education prior to age six	8,011	29.8

¹Excludes those for whom data were not available.

This early educational training may not have been extensive or necessarily have been related to the child's hearing impairment. A later report on this variable will include more information about those kinds of educational programs in which students were enrolled.

SUMMARY

One-dimensional summaries of selected characteristics for 35,285 students enrolled in participating special educational programs for the hearing impaired have been presented. The methodology used in collecting the data has been discussed along with the qualifications and limitations of the data.

It was noted that these 35,285 students represented about 80 percent of the estimated enrollment in those programs invited to participate. It also was mentioned that students receiving itinerant services for their hearing impairment were underrepresented in the data.

Highlights from the discussion of the data include the fact that five year old students accounted for nearly 10 percent of all students and it was indicated that of those for whom a better ear average was obtained, almost one half had a better ear average of 85dB and above.

Regarding additional handicapping conditions, it should be noted that of those for whom information was reported, 32 percent of the students had an additional handicapping condition. For these students, mental retardation was the condition most frequently reported.

Age at onset of hearing loss was reported as occurring at birth for 78 percent of the students for whom the information was given. For students for whom age of discovery of hearing loss was reported, discovery occurred either at birth or prior to 3 years of age for about 64 percent of the students. The most frequently reported cause of hearing loss was maternal rubella which was reported as the only cause or in combination with another cause for 4,321 students (27 percent). Similarly, hereditary factors were attributed to the hearing loss of 2,390 students (15 percent).

Data on parental history of deafness prior to age six were collected, and where the information was

available, it was found that 9 percent of the students had at least one parent who had a hearing loss prior to age six. Of those students for whom information was requested and it was reported, 33 percent were known not to use a personal hearing aid. The final variable discussed was the age the child started his education prior to age six. Thirty percent of the students had no education prior to age six while 70 percent had some training.

Future reports issued by the Survey Office will provide further details regarding these variables and other variables collected during the 1969-70 school year.

LIST OF DETAILED TABLES

TABLE 1: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by States: United States, 1969-70 School Year.

TABLE 2: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age: United States, 1969-70 School Year.

TABLE 3: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Hearing Threshold Levels: United States, 1969-70 School Year.

TABLE 4: Number and Rate Per 1,000 Students, of Additional Handicapping Conditions Among Students Enrolled in Participating Special Educational Programs for the Hearing Impaired: United States, 1969-70 School Year.

TABLE 5: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age at Onset of Hearing Loss: United States, 1969-70 School Year.

TABLE 6: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age Hearing Loss Discovered: United States, 1969-70 School Year.

TABLE 7: Number and Rate Per 1,000 Students, of Probable Causes of Hearing Loss Among Students Enrolled in Participating Special Educational Programs for the Hearing Impaired: United States, 1969-70 School Year.

TABLE 8: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by History of Parental Deafness Before Age Six: United States, 1969-70 School Year.

TABLE 9: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Hearing Aid Use: United States, 1969-70 School Year.

TABLE 10: Number and Percentage Distribution of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age Started Formal Education Prior to Age Six: United States, 1969-70 School Year.

TABLE: 1 NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY STATES: UNITED STATES, 1969-70 SCHOOL YEAR.

States	Number of Students	Percent
Total	35,285 ¹	100.0
ALABAMA	511	1.4
ALASKA	24	.1
ARIZONA	333	.9
ARKANSAS	14	*
CALIFORNIA	3,520	10.0
COLORADO	340	1.0
CONNECTICUT	296	.8
DELAWARE	101	.3
DISTRICT OF COLUMBIA	329	.9
FLORIDA	864	2.4
GEORGIA	645	1.8
HAWAII	154	.4
IDAHO	117	.3
ILLINOIS	2,032	5.8
INDIANA	771	2.2
IOWA	476	1.3
KANSAS	514	1.5
KENTUCKY	442	1.3
LOUISIANA	638	1.8
MAINE	189	.5
MARYLAND	720	2.0
MASSACHUSETTS	800	2.3
MICHIGAN	1,594	4.5
MINNESOTA	749	2.1
MISSISSIPPI	—	—
MISSOURI	692	2.0
MONTANA	116	.3
NEBRASKA	233	.7
NEVADA	52	.1
NEW HAMPSHIRE	136	.4
NEW JERSEY	398	1.1
NEW MEXICO	213	.6
NEW YORK	2,483	7.0
NORTH CAROLINA	1,004	2.8
NORTH DAKOTA	117	.3
OHIO	2,214	6.3
OKLAHOMA	110	.3
OREGON	596	1.7
PENNSYLVANIA	5,108	14.5
RHODE ISLAND	149	.4
SOUTH CAROLINA	431	1.2
SOUTH DAKOTA	112	.3
TENNESSEE	722	2.0
TEXAS	1,749	5.0
UTAH	225	.6
VERMONT	121	.3
VIRGINIA	663	1.9
WASHINGTON	697	2.0
WEST VIRGINIA	182	.5
WISCONSIN	539	1.5
WYOMING	50	.1

* Less than .05 percent.

¹These figures represent only the enrollment in those programs participating in the Annual Survey. They do not indicate the total number of hearing impaired students enrolled in special educational programs within particular states.

TABLE 2: NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY AGE: UNITED STATES, 1969-70 SCHOOL YEAR

Age	Number of Students	Percent
All Ages	35,285	100.0
Under 3 Years	336	1.0
3 Years	699	2.0
4 Years	1,865	5.3
5 Years	3,478	9.9
6 Years	1,766	5.0
7 Years	2,020	5.7
8 Years	2,076	5.9
9 Years	2,462	7.0
10 Years	2,946	8.3
11 Years	3,309	9.4
12 Years	2,362	6.7
13 Years	2,264	6.4
14 Years	2,115	6.0
15 Years	1,936	5.5
16 Years	1,836	5.2
17 Years	1,708	4.8
18 Years	1,168	3.3
19 Years	586	1.7
20 Years and Over	353	1.0

TABLE 3: NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HEARING THRESHOLD LEVELS: UNITED STATES, 1969-70 SCHOOL YEAR

Better Ear Averages In Decibels (ISO) ¹	Number of Students	Percent
All Hearing Levels	35,285	100.0
Under 15	518	1.5
15-19	268	.8
20-24	265	.8
25-29	551	1.6
30-34	506	1.4
35-39	540	1.5
40-44	557	1.6
45-49	666	1.9
50-54	823	2.3
55-59	929	2.6
60-64	1,165	3.3
65-69	1,387	4.0
70-74	1,616	4.6
75-79	1,759	5.0
80-84	1,818	5.2
85-89	1,907	5.4
90-94	2,225	6.3
95-98	2,285	6.5
99 and Above	6,563	18.6
Unable to Compute ²	7,187	20.4
Data Not Reported	1,743	4.9

¹ Average hearing threshold in better ear computed at 500, 1,000, 2,000 cycles per second.

² The average could not be determined due to the omission of one or more of the frequencies used to compute the better ear average.

TABLE 4: NUMBER AND RATE PER 1,000 STUDENTS, OF ADDITIONAL HANDICAPPING CONDITIONS AMONG STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED: UNITED STATES, 1969-70 SCHOOL YEAR.

Additional Handicapping Conditions	Total Number of Reported Conditions ¹	Number of Conditions Per 1,000 Students ²	Number of Times Condition Reported as the Only Additional Handicap	Number of Times Condition Reported in Combination With Other Handicapping Conditions
Total	12,224	419.6	7,075	5,149
Behavioral Problems	1,787	61.3	811	976
Brain Damage	154	5.3	128	26
Cerebral Palsy	965	33.1	635	330
Cleft Lip or Palate	188	6.5	136	52
Emotional Problems	1,975	67.8	855	1,120
Epilepsy	165	5.7	102	63
Heart Disorders	406	13.9	242	164
Learning Disabilities	908	31.2	817	91
Mental Retardation	2,083	71.5	1,220	863
Orthopedic Disorders	193	6.6	143	50
Perceptual Motor Disorders	1,588	54.5	842	746
Severe Visual	1,312	45.0	718	594
Other	500	17.2	426	74

¹For some students more than one additional handicap was reported.

²Based on 29,131 students. Excluded are the 6,154 students for whom this information was not reported.

TABLE 5: NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY AGE AT ONSET OF HEARING LOSS: UNITED STATES, 1969-70 SCHOOL YEAR

Age at Onset of Hearing Loss	Number of Students	Percent
Total	35,285	100.0
Onset at Birth	22,102	62.6
Under 1 Year	1,530	4.3
1 Year	1,663	4.7
2 Years	1,075	3.0
3 Years	632	1.8
4 Years	353	1.0
5 Years	317	.9
6 Years	289	.8
7 Years	167	.5
8 Years	133	.4
9 Years and Over	228	.6
Unknown	6,796	19.3

TABLE 6: NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY AGE HEARING LOSS DISCOVERED: UNITED STATES, 1969-70 SCHOOL YEAR

Age Hearing Loss Discovered	Number of Students	Percent
Total	35,285	100.0
Discovered at Birth	191	.5
Under 1 Year	3,003	8.5
1 Year	4,068	11.5
2 Years	3,468	9.8
3 Years	1,789	5.1
4 Years	919	2.6
5 Years	1,023	2.9
6 Years	985	2.8
7 Years	479	1.4
8 Years	288	.8
9 Years and Over	512	1.5
Unknown	18,560	52.6

TABLE 7: NUMBER AND RATE PER 1,000 STUDENTS, OF PROBABLE CAUSES OF HEARING LOSS AMONG STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED: UNITED STATES, 1969-70 SCHOOL YEAR

Probable Cause of Hearing Loss	Total Number of Specified Causes ¹	Occurrence of Specified Cause Per 1,000 Students ²	Number of Times Specified Cause Attributed as the Only Cause of Hearing Loss	Number of Times Specified Cause Reported in Combination With Other Causes
<u>Causes of Hearing Loss With Onset at Birth</u>				
Maternal Rubella	4,321	267.1	4,057	264
Trauma at Birth	579	35.8	382	197
Trauma to Mother	161	10.0	80	81
Medication During Pregnancy	181	11.2	95	86
Prematurity	1,610	99.5	1,081	529
Rh Incompatibility	1,076	66.5	826	250
Complications of Pregnancy	681	42.1	389	292
Hereditary	2,390	147.8	2,287	103
Other Causes	706	43.6	632	74
<u>Causes of Hearing Loss With Onset After Birth</u>				
Meningitis	1,677	103.7	1,606	71
Mumps	269	16.6	153	116
Measles	910	56.3	685	225
Otitis Media	711	44.0	579	132
Trauma	317	19.6	283	34
Other Causes ³	2,003	123.8	1,835	168

¹For some students more than one cause was reported.

²Based on 16,175 students for whom a specified cause was reported. Excludes 19,110 students for whom there was no known cause or a cause was not reported.

³A large proportion of these were reported as "High Fever".

TABLE 8: NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HISTORY OF PARENTAL DEAFNESS BEFORE AGE SIX: UNITED STATES, 1969-70 SCHOOL YEAR

History of Parental Deafness Before Age Six	Number of Students	Percent
Total	35,285	100.0
<u>Both Parents Normal Hearing</u>	<u>19,385</u>	<u>54.9</u>
<u>At Least One Parent With Hearing Loss</u>	<u>1,889¹</u>	<u>5.4</u>
Both Parents With Loss	869	2.5
Mother With Loss: Father Normal	261	.7
Father With Loss: Mother Normal	199	.6
One Parent With Loss: Other Parent Normal	372	1.1
Mother With Loss: Information on Father Not Available	140	.4
Father With Loss: Information on Mother Not Available	48	.1
<u>Mother Normal: Information on Father Not Available</u>	<u>583</u>	<u>1.7</u>
<u>Father Normal: Information on Mother Not Available</u>	<u>133</u>	<u>.4</u>
<u>Unknown or Not Reported for Both Parents</u>	<u>13,295</u>	<u>37.7</u>

¹Total number of parents reported as having a hearing loss prior to age six is 2,758.

TABLE 9: NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HEARING AID USE: UNITED STATES, 1969-70 SCHOOL YEAR

Hearing Aid Use	Number of Students	Percent
Total	29,654¹	100.0
Student Does Not Use Personal Aid	7,831	26.4
Student Uses Monaural Aid	10,926	36.8
Student Uses Binaural Aid	2,894	9.8
Student Uses Y Cord	1,349	4.5
Uses Aid, Type Not Reported	876	3.0
Unknown or Not Reported	5,778	19.5

¹ Does not include 5,631 students for whom this information was not requested.

TABLE 10: NUMBER AND PERCENTAGE DISTRIBUTION OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY AGE STARTED FORMAL EDUCATION PRIOR TO AGE SIX: UNITED STATES, 1969-70 SCHOOL YEAR

Age Started Formal Education Prior To Age Six	Number of Students	Percent
Total	35,285	100.0
1 Year of Age	787	2.2
2 Years of Age	2,234	6.3
3 Years of Age	4,798	13.6
4 Years of Age	4,343	12.3
5 Years of Age	5,135	14.6
Some Education, but Age Started Unknown	1,580	4.5
No Education Prior to Age Six	8,011	22.7
Unknown or Not Reported	8,397	23.8

APPENDICES

- Appendix I — Description of the Annual Survey of Hearing Impaired Children and Youth**
- Appendix II — Basic Data Form Used in the Annual Survey for the 1969-70 School Year**
- Appendix III — Preschool Data Form Used in the Annual Survey for the 1969-70 School Year**
- Appendix IV — Programs Participating in the Annual Survey of Hearing Impaired Children and Youth**

APPENDIX I

THE ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN AND YOUTH

BACKGROUND AND PURPOSE

The Annual Survey of Hearing Impaired Children and Youth began its activities in May, 1968. The program is established as a permanent research organization to collect, process and disseminate data on hearing impaired individuals through college age in the United States. The need for such information on this universe has been of prime concern to educators, audiologists, legislators, psychologists, and others.

Two preceding years of pilot and developmental work in a five state area determined its operational feasibility and crystalized its methodology. The Division of Research, Bureau of Education for the Handicapped, Office of Education, Department of Health, Education and Welfare initiated the Annual Survey and provides the major share of its funding. The program is conducted by the Office of Demographic Studies of Gallaudet College.

The long range goal of the Annual Survey is to collect data on the entire hearing impaired population through college age in the United States. For operational reasons the hearing impaired population has been divided into three groups:

- GROUP A — Hearing impaired individuals who are receiving special educational services related to their hearing loss.
- GROUP B — Individuals who have been diagnosed as being hearing impaired but who are not receiving any special educational services.
- GROUP C — Individuals in the general population who, in fact, are hearing impaired but their hearing loss has not been diagnosed at a given point of time.

POLICIES AND PRINCIPLES

It is of paramount importance that participating institutions be assured that the data collected will

be held in strictest confidence. Only staff members of the Office of Demographic Studies will have access to the records and then only for the purpose of preparing statistical summaries for analyses of the data. Individual student identification may be established by code numbers assigned and known only by the reporting institution. Each school will receive data on its own students, but no information permitting identification of any individual student or school will be published or made available for any purpose. Independent researchers will have access only to summary statistics and will not know the identity of the schools from which the data were compiled.

Of great importance is the fact that policies and direction of the Annual Survey are determined by a committee representing all areas of services to hearing impaired individuals. The committee is formally called the National Advisory Committee to the Annual Survey of Hearing Impaired Children and Youth. Its membership has broad width and depth in technical and executive expertise. In addition, a technical subcommittee composed of members of the Advisory Committee is called upon for advice and direction as special needs arise.

Suggestions and comments also come from discussions with teachers, audiologists, psychologists and other professionals who work directly with hearing impaired individuals. Also, aside from these direct contacts the staff members of the Annual Survey have with people in the field, periodic formal surveys of the cooperating educational programs are conducted to aid in determining the kinds of information needed in the field. To be effective, the program must assist these persons in solving problems with which they struggle day after day.

Since the Annual Survey attempts to promote the use of its data by those whose judgements and decisions will have a direct or indirect bearing on the education of hearing impaired individuals, it recognizes a responsibility to devote a part of its resources to the evaluation of the quality of the data collected and disseminated. This is particularly im-

portant because it seeks to establish national norms on the basic characteristics of hearing impaired children and youth that may be used by teachers, administrators and researchers. Thus, in the dissemination of information, the Annual Survey makes every effort to properly qualify the data and indicate any limitation associated with it.

Fourthly, the Annual Survey devotes part of its resources to developing the methodologies and instruments for best collecting data on a continuing basis for a national population of hearing impaired children and youth. The methodologies and instruments are of two basic kinds: (1) those associated with basic demographic variables that are collected on the total student population each year, and (2) those relating to the performance of the student in various areas, or to topics of special interest in a given year which may be collected on a sample basis.

DATA COLLECTION

1968-69 School Year

During the first year of the program, data collection activities were directed towards all schools for the deaf and a representative sample (15 percent) of all special classes. In addition, records on students who were receiving itinerant services were obtained in total from two states and in part from several states. In all 25,363 individual records were collected. This represented nearly 80 percent of the total enrollment of all institutions invited to participate.

Also during the first year, an academic Achievement Testing Program was conducted. Over 12,000 Stanford Achievement Tests were administered. The Annual Survey supplied testing materials and scoring services free of charge to participating programs. Achievement test scores for hearing impaired students based on the results of that testing program were published and distributed in the Fall of 1969. In addition, each participating school received distributions of achievement test scores based on the performance of their own students.

1969-70 School Year

The Annual Survey extended its coverage during the second year of data collection. Efforts were made to reach students in all of the special classes for the hearing impaired, as well as in all of the schools. Data were obtained on 35,285 students from 435 reporting sources.

1970-71 School Year

Approximately 600 reporting sources with about 42,000 students enrolled in their programs are cooperating with the Annual Survey for the 1970-71 school year. This represents an increase of 197 new participating educational programs with almost 8,000 students. At the same time, about 98 percent of those programs that participated last year have been retained in this year's Survey.

An Achievement Testing Program is being conducted again this year by the Annual Survey. Approximately 305 sources including roughly 22,000 students are involved in this program. The procedures being followed in the current program were influenced heavily by the results of the Achievement Testing Program conducted by the Annual Survey during the 1968-69 school-year. This influence is reflected especially in three areas of this year's program: (1) Students were given a screening test to determine the most appropriate battery they should receive. (2) The schools were supplied with practice materials for their students, to familiarize students with test format and procedures. (3) In cooperation with Harcourt Brace Jovanovich, Inc., the test publishers, special printings of the Primary levels were arranged in which written instructions were provided to supplement oral ones. A reliability study also is being conducted in conjunction with this year's Achievement Testing Program. This evaluation study will help to determine the reliability of an achievement test designed for hearing students when used by hearing impaired students. This study is also designed to shed some light on the validity of these tests.

PROGRAM SERVICES AND PUBLICATION OF THE DATA

The program is accumulating a large volume of statistical data. The processing and dissemination of these data hold wide implications and potential benefits for educational, audiological, medical, psychological, legislative and other services to the hearing impaired. Towards the goal of fully utilizing the data, the program will make data available to independent investigators for research purposes. Masters' theses, doctoral dissertations, institutional level research programs, private studies, etc., are solicited. Competent researchers are encouraged to propose detailed analyses of the data to further increase its usefulness. The Office of Demographic Studies will not permit the data to be used in a manner that is not scientific or objective in its approach. The Annual Survey plans to produce at

least six major publications per year not including those that may be prepared by independent researchers using data collected by this program.

The Survey Office also provides each participating school or program with tabulations of the characteristics of their own students. The participating programs may obtain a set of punch cards containing the information submitted on each of their students. Further, the Annual Survey Office is available to provide consultation services to particular schools or school systems that are concerned with gathering and processing data on their students.

Participation in the Survey has led many of the programs to examine their current forms and record keeping procedures. This led to requests that the Survey develop a uniform record form to keep student information for use in schools and classes throughout the country. Such a form was developed

and used on a trial basis by a few schools during the 1970-71 school year. On the basis of this experience, the form was revised and will be distributed for use during the 1971-72 school year. Preliminary indications are that more than half of the educational programs in the United States are planning to use the form during the coming school year.

The initial success of the Annual Survey can be measured only in terms of the levels of participation and interest expressed by many individuals. The ultimate success will be measured not in terms of volume of data that will be collected and published, but in terms of its contributions to improving educational and other opportunities for hearing impaired children and youth. In this regard, it appears that progress is being made. For the first time a vast body of statistical information is becoming available for research and planning purposes.

APPENDIX II

OFFICE OF DEMOGRAPHIC STUDIES
GALLAUDET COLLEGE, WASHINGTON, D.C.

BASIC DATA FORM

ACHIC-2

ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN—1969-70 School Year

CONFIDENTIAL: All information which would permit identification of any individual or institution will be held strictly confidential and will be used only by persons engaged in the survey for preparing statistical summaries. The data will not be disclosed to others for any other purpose.

Name of Reporting Source: _____

I. GENERAL INFORMATION

- A. 1. Name of Student _____ Date of Birth _____ Sex ☐ M ☐ F
or Code Number (Last) (First) (Middle) (Mo., Day, Yr.)
2. Residence _____
(City) (County) (State)
- B. 1. Present School or Agency _____
(Name)
2. Location _____
(Number and Street) (City) (County) (State & ZIP Code)

II. EDUCATIONAL PROGRAM

- A. 1. For students enrolled fulltime in a special class or school, check below:
☐ School for the Deaf ☐ Classes for Hearing Impaired
☐ School for Multiply Handicapped ☐ Classes for Multiply Handicapped
2. For students who do not attend a special school or class on a fulltime basis, enter type of program below:
 Regular Classes _____ hours per week; plus itinerant services _____ hours per week.
 Regular Classes _____ hours per week; plus other special educational services _____ hours per week.
 Special Classes _____ hours per week
 Other (specify type and hours per week): _____
- B. 1. Type of school or agency: ☐ Public ☐ Private
 2. Type of student: ☐ Residential ☐ Day

III. EDUCATIONAL HISTORY

- A. Date first enrolled in this school: _____
- B. Educational history since age six:
 1. Total full years attended this school since age six: _____ (Do not include present school year)
 2. Attendance at other schools since age six. (Do not include present school):
 Mark all that apply. If none check here ☐
 Regular Classes _____ Years Regular Classes Plus _____ Years Fulltime Classes for Hearing _____ Years Schools for the Deaf- _____ Years Other- _____ Years
 Only- _____ Years Special Training- _____ Years Impaired- _____ Years
- C. Formal education prior to age six: If none check here ☐ If unknown check here ☐
 1. Age started _____
 2. Type (check all that apply):
☐ Preschool for Hearing ☐ Preschool for Hearing Impaired ☐ Preschool for Hearing Plus Special Training
☐ Preschool for Multiply Handicapped ☐ Parent-Child Program ☐ Other (specify) _____

IV. HISTORY OF HEARING LOSS

- A. STUDENT HISTORY
1. Probable age at onset of hearing loss: ☐ At Birth _____ Years of Age
2. Age hearing loss discovered: _____ Years _____ Months
3. If onset of loss at birth, what was probable cause (mark all that apply): ☐ No Known Cause ☐ Data Not Available
☐ Maternal Rubella ☐ Trauma to Mother ☐ Prematurity ☐ Complications of Pregnancy ☐ Hereditary
☐ Trauma at Birth ☐ Medication During Pregnancy ☐ RH Incompatibility ☐ Other (specify) _____
4. If loss acquired after birth, what was probable cause (mark all that apply): ☐ No Known Cause ☐ Data Not Available
☐ Meningitis ☐ Mumps ☐ Measles ☐ Otitis-Media ☐ Trauma
☐ Other (specify): _____
5. Birth weight, if known: _____ lbs. _____ ozs.
- B. FAMILY HISTORY
1. Mother (check one): ☐ Normal hearing before age 6; ☐ Hearing loss before age 6; ☐ Data not available.
 2. Father (check one): ☐ Normal hearing before age 6; ☐ Hearing loss before age 6; ☐ Data not available.
3. Siblings (indicate number in each category—If none, write "0"):
 Total number _____; Normal hearing before age 6 _____; Hearing loss before age 6 _____; ☐ Data not available
4. Does student have a twin: ☐ Yes ☐ No (If yes, complete items 4(a) and 4(b) below):
 (a) Sex of twin: ☐ M ☐ F
 (b) Is twin enrolled in this school: ☐ Yes ☐ No
5. Is there any familial history of deafness other than indicated above: ☐ Yes ☐ No
6. Are parents known to be related in any way? ☐ Yes ☐ No

V. AUDIOLOGICAL FINDINGSA. ☐ Not Tested ☐ Unable To Test ☐ Tested, But Results Not AvailableB. ☐ Tested (Record Results Below):1. Standard used for testing: ☐ ISO ☐ ASA ☐ Free Field (Symbol ~)

RIGHT EAR									LEFT EAR							
Frequency	125	250	500	1000	2000	4000	6000	8000	125	250	500	1000	2000	4000	6000	8000
2. Air Conduction																
Bone Conduction																

C. UNAIDED SPEECH THRESHOLD

1. Test Used: ☐ SAT ☐ SRT ☐ Not Tested

RIGHT EAR						LEFT EAR					
0-15dB	16-29dB	30-44dB	45-59dB	60-79dB	80dB & over	0-15dB	16-29dB	30-44dB	45-59dB	60-79dB	80dB & over
2.											

D. EXAMINER IDENTIFICATION

Name of clinic or place conducting audiological examination

Date _____

Address _____

(Number and Street)

(City)

(State & ZIP Code)

Profession of Examiner: ☐ Audiologist ☐ Otologist ☐ Other M.D. ☐ Audiometrist ☐ Nurse ☐ Teacher

Other (specify) _____

VI. INTELLIGENCE TEST

Indicate results of most recent intelligence test

Description of Test		I.Q. Scores		Date Tested
Name	Level	Verbal	Nonverbal	
_____	_____	_____	_____	_____

(Month, Yr.)

VII. ADDITIONAL HANDICAPPING CONDITIONSCheck all educationally significant handicapping conditions: If none, check here ☐

- | | | | |
|---|---|--|---|
| <input type="checkbox"/> Epilepsy | <input type="checkbox"/> Severe Visual | <input type="checkbox"/> Emotional Problems | <input type="checkbox"/> Perceptual-Motor Disorders |
| <input type="checkbox"/> Cleft Lip or Palate | <input type="checkbox"/> Mental Retardation | <input type="checkbox"/> Behavioral Problems | <input type="checkbox"/> Cerebral Palsy |
| <input type="checkbox"/> Other (describe) _____ | | | |

COMMENTS:

APPENDIX III

OFFICE OF DEMOGRAPHIC STUDIES, GALLAUDET COLLEGE, WASHINGTON, D.C.

ACHIC-4

(This form is to be used for children who will become six years of age after December 31, 1969)

ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN — 1969-70 School Year

CONFIDENTIAL: All information which would permit identification of any individual or institution will be held strictly confidential and will be used only by persons engaged in the survey for preparing statistical summaries. The data will not be disclosed to others for any other purpose.

Name of Reporting Source: _____

I. GENERAL INFORMATION

- A. 1. Name of Student _____ Date of Birth _____ Sex ☐ M ☐ F
 2. Code Number (Last) (First) (Middle) (Mo., Day, Yr.)
 2. Residence _____
 (City) (County) (State)
 B. 1. Present School or Agency _____
 (Name)
 2. Location _____
 (Number and Street) (City) (County) (State & ZIP Code)

II. EDUCATIONAL PROGRAM

A. TYPE OF SCHOOL OR AGENCY

1. ☐ School for Hearing ☐ Residential School for Deaf ☐ School for Multiply Handicapped
☐ Classes for Hearing Impaired ☐ Day School for Deaf ☐ Speech and Hearing Clinic
☐ Other (specify): _____

2. Is School or Agency: ☐ Public ☐ Private

3. Type of Student: ☐ Residential ☐ Day

B. TYPE OF PROGRAM

1. Indicate number of hours per week the child is seen: _____ Hours Per Week
 2. Is the child seen: ☐ Individually ☐ Group or ☐ Both
 3. Total time child has been enrolled in this school or agency: _____ Years _____ Months
 4. Parent Training:
 (a) Are parents enrolled in a special parent program: ☐ Yes ☐ No
 (b) Are parents participating in a correspondence course: ☐ Yes ☐ No

III. EDUCATIONAL HISTORY

- A. Prior to the present program, has the child received other special educational training: ☐ Yes ☐ No
 1. If YES, age started first program: _____ Years _____ Months
 2. Type (specify): _____
 3. Total time enrolled: _____ Years _____ Months

IV. HISTORY OF HEARING LOSS

A. STUDENT HISTORY

1. Probable age at onset of hearing loss: ☐ At Birth _____ Years of Age
 2. Age hearing loss discovered: _____ Years _____ Months
 3. If onset of loss at birth, what was probable cause (mark all that apply): ☐ No Known Cause ☐ Data Not Available
☐ Maternal Rubella ☐ Trauma to Mother ☐ Prematurity ☐ Complications of Pregnancy ☐ Hereditary
☐ Trauma at Birth ☐ Medication During Pregnancy ☐ RH Incompatibility ☐ Other (specify): _____
 4. If loss acquired after birth, what was probable cause (mark all that apply): ☐ No Known Cause ☐ Data Not Available
☐ Meningitis ☐ Mumps ☐ Measles ☐ Otitis-Media ☐ Trauma
☐ Other (specify): _____
 5. Birth weight, if known: _____ lbs. _____ ozs.

B. FAMILY HISTORY

1. Mother (check one): ☐ Normal hearing before age 6; ☐ Hearing loss before age 6; ☐ Data not available.
 2. Father (check one): ☐ Normal hearing before age 6; ☐ Hearing loss before age 6; ☐ Data not available.
 3. Siblings (indicate number in each category—If none, write "0"):
 Total number _____; Normal hearing before age 6 _____; Hearing loss before age 6 _____; ☐ Data not available
 4. Does student have a twin: ☐ Yes ☐ No (If yes, complete items 4(a) and 4(b) below):
 (a) Sex of twin: ☐ M ☐ F
 (b) Is twin enrolled in this school: ☐ Yes ☐ No
 5. Is there any familial history of deafness other than indicated above: ☐ Yes ☐ No
 6. Are parents known to be related in any way? ☐ Yes ☐ No

V. AUDIOLOGICAL FINDINGSA. ☐ Not Tested ☐ Unable To Test ☐ Tested, But Results Not AvailableB. ☐ Tested (Record Results Below):1. Standard used for testing: ☐ ISO ☐ ASA ☐ Free Field (Symbol \sim)

RIGHT EAR									LEFT EAR							
Frequency	125	250	500	1000	2000	4000	6000	8000	125	250	500	1000	2000	4000	6000	8000
2. Air Conduction																
Bone Conduction																

C. UNAIDED SPEECH THRESHOLD

1. Test Used: ☐ SAT ☐ SRT ☐ Not Tested

RIGHT EAR						LEFT EAR					
0-15dB	16-29dB	30-44dB	45-59dB	60-79dB	80dB & over	0-15dB	16-29dB	30-44dB	45-59dB	60-79dB	80dB & over
2.											

D. EXAMINER IDENTIFICATION

Name of clinic or place conducting audiological examination

Date _____

Address _____
(Number and Street) (City) (State & ZIP Code)Profession of Examiner: ☐ Audiologist ☐ Otologist ☐ Other M.D. ☐ Audiometrist ☐ Nurse ☐ Teacher

Other (specify) _____

VI. INTELLIGENCE TEST

Indicate results of most recent intelligence test

Description of Test		I.Q. Scores		Date Tested
Name	Level	Verbal	Nonverbal	
_____	_____	_____	_____	_____
				(Month, Yr.)

VII. ADDITIONAL HANDICAPPING CONDITIONSCheck all educationally significant handicapping conditions: If none, check here ☐

<input type="checkbox"/> Epilepsy	<input type="checkbox"/> Severe Visual	<input type="checkbox"/> Emotional Problems	<input type="checkbox"/> Perceptual-Motor Disorders
<input type="checkbox"/> Cleft Lip or Palate	<input type="checkbox"/> Mental Retardation	<input type="checkbox"/> Behavioral Problems	<input type="checkbox"/> Cerebral Palsy
<input type="checkbox"/> Other (describe) _____			

VIII. HEARING AID USEA. Does Student Use a Personal Aid? ☐ Yes ☐ NoIf YES, is aid: ☐ Monaural ☐ Binaural ☐ Y Cord

B. Speech Awareness Threshold With Aid is _____ dB.

C. Speech Reception Threshold With Aid is _____ dB.

COMMENTS:

APPENDIX IV

Participants in the Annual Survey of Hearing Impaired Children and Youth

ALABAMA

- Alabama Institute for the Deaf & Blind
- *Bessemer City Schools
- Birmingham Public Schools
- *Blossomwood Elementary School
- *Children's Center of Montgomery, Inc.
- *Etowah County Board of Education
- *Franklin County Board of Education
- *Holt Elementary School
- *Huntsville Rehabilitation Center
- *Lewis-Slossfield Speech & Hearing Center
- *Mobile County Deaf Education Program
- *Mobile Preschool for the Deaf, Inc.
- *Tuscaloosa County Schools
- *University of Montevallo Speech & Hearing Clinic

ALASKA

- *Alaska Treatment Center for Crippled Children & Adults, Inc.
- Anchorage Borough School District
- *Bethel State School

ARIZONA

- Arizona State School for the Deaf & Blind
- *Emerson School
- Samuel Gompers Memorial Rehabilitation Center, Inc.
- *Phoenix Day School for the Deaf
- Phoenix Elementary Oral Day Classes

ARKANSAS

- Arkansas Speech & Hearing Center
- Jenkins Memorial Children's Center

CALIFORNIA

- Alhambra City School District
- Alum Rock Union Elementary School District
- Anaheim Union High School District
- *Aurally Handicapped Classes of Solano County
- Bellflower Unified School District
- Mary E. Bennett School for the Deaf
- Butte County Schools

- *California School for the Blind, Deaf-Blind Department
- California School for the Deaf, Berkeley
- California School for the Deaf, Riverside
- Cedarcreek School for the Deaf
- Centinela Valley Union High School District
- Centralia School District
- Ceres Unified School District
- *Chula Vista City School District
- Covina Valley Unified School District
- Cutler-Orosi Unified School District
- *Downey Senior High School
- *East San Gabriel Valley School for Multi-Handicapped Children
- Escondido Union School District
- Fremont Unified School District —
- Blacow Elementary
- Fresno City Unified School District
- *Garden Grove Unified School District
- Goleta Union Elementary School District
- Hayward City Unified School District
- Chris Jespersen School
- Kern County Schools
- *La Mesa — Spring Valley School District
- Lancaster Elementary School District
- *Language, Hearing, & Speech Clinic, Fresno State College
- Little Lake City Elementary School District
- Livermore Valley Joint Unified School District
- Lompoc Unified School District
- Long Beach Unified School District
- Marin County Schools
- Marlton Elementary School
- Montebello Unified School District
- Monterey County Schools
- Mt. Diablo Therapy Center
- Mt. Diablo Unified School District
- Napa Valley Unified School District
- Norwalk-La Mirada Unified School District
- Oakland City Unified School District
- Orange Unified School District
- *Orcutt Union Elementary School District

*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

- *Pajaro Valley Unified School District
- *Palo Alto Unified School District
- Pasadena City Unified School District
- *Placer County Public Schools
- Pomona Unified School District
- Redondo Beach City Elementary School District
- Richmond Unified School District
- Riverside Unified School District
- Sacramento City Unified School District
- *San Bernardino County Schools
- San Diego Unified School District
- San Francisco Speech & Hearing Center
- San Jose City Unified School District
- San Juan Unified School District
- San Mateo County Classes for the Deaf
- San Mateo Union High School District
- Santa Ana Unified School District
- Santa Clara Unified School District
- *Santa Cruz County Itinerant Program for the Hearing Impaired
- Santa Rosa City School District
- Shasta County Schools
- Simi Valley Unified School District
- *South Junior High School
- Southwest School for the Deaf
- Stockton Unified School District
- Sunnyvale Elementary School District
- Sutter County Schools – Lincrest School
- *Tehama County Public Schools
- Tulare County Schools
- Tulare Union High School District
- Union Elementary School District
- Ventura Unified School District

COLORADO

- *Aurora Public Schools
- Children's Hospital, Denver
- Colorado School for the Deaf & Blind
- *Colorado Speech & Hearing Center, Denver
- Colorado State College – Bishop Lehr Laboratory
- Jefferson County Public Schools R-1
- *John Evans School
- *Meadow Elementary School
- Pleasant View Elementary School
- Poudre R-1 Services for Aurally Handicapped Children

CONNECTICUT

- *American School for the Deaf
- Capitol Region Education Council – Hearing Impaired Class

- Class for Preschool Hearing Impaired Children, Hartford
- Easter Seal Goodwill Industries Rehabilitation Center
- *East Hartford Public Schools
- Enfield Public Schools – Preschool Hearing Impaired Class
- Fairfield Public Schools – Preschool Hearing Impaired Class
- Green Acres School
- Hamden-New Haven Cooperative Educational Center
- *Kings Highway School
- Magrath School
- Monroe Preschool Hearing Impaired Program
- Mystic Oral School for the Deaf
- Reynolds Preschool Hearing Impaired Program
- South School
- West Haven Department of Special Education

DELAWARE

- Margaret S. Sterck School for Hearing Impaired

DISTRICT OF COLUMBIA

- *Capitol Region Model Secondary School for the Deaf
- Department of Special Education
- Kendall School for the Deaf
- Speech and Hearing Center – Public Schools of the District of Columbia

FLORIDA

- *Allie Yniestra School
- Brevard County Public Schools
- Dade County Day Classes for Deaf
- *Easter Seal Rehabilitation Center, Fort Lauderdale
- *Edge Elementary School
- Florida School for the Deaf & Blind
- Hillsborough County Public Schools
- *Holly Hill Elementary School
- *Jackson Memorial Hospital, Audiology – Speech Pathology
- *Lee County Department of Special Education
- *Leon County Program for Hearing Impaired Children
- Robert McCord Oral School
- Palm Beach County School
- *Pinellas County Schools
- Rock Lake Elementary School

*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

- *Speech and Hearing Center, Inc., Jacksonville
- *Tampa Oral School for the Deaf

GEORGIA

- *Atlanta Public Schools
- Atlanta Speech School, Inc.
- Cobb County Board of Education
- The Davison School, Inc.
- Lawton B. Evans School
- Georgia School for the Deaf
- *Houston Speech & Hearing School
- Savannah Speech & Hearing Center
- *Robert Shaw Center

HAWAII

- Central Intermediate School
- Diamond Head School for the Deaf
- McKinley High School

IDAHO

- Idaho School for the Deaf & Blind
- Speech & Hearing Center — Idaho State University

ILLINOIS

- Bartonville Grade School Deaf Program
- Bell Elementary School
- Bi-County Oral Deaf Program
- Black Hawk Hearing Handicapped Program
- Champaign Community Schools
- Chicago Vocational High School
- Decatur Public School District
- Dixon State School
- Elim Christian School for the Exceptional Child
- Ericson School
- *Nathaniel Greene School
- *Harrison High School
- Dr. Robert Henner Hearing & Speech Center
- Illinois School for the Deaf
- *The Institute for Hearing & Speech
- Jamieson School
- Maine Township Special Education Program
- Marquette Elementary School
- Thomas Metcalf School
- *Morrill Elementary School
- Niles Township Department of Special Education
- *Northern Suburban Special Education District
- Northwestern Illinois Association
- Northwest Suburban Special Education Organization

- Perry School
- *Quincy Public Schools
- Ray School
- Reinberg School
- *St. Joseph's Speech & Hearing Clinic
- Scammon School
- *Shields Elementary School
- South Metropolitan Association for Low-Incidence Handicapped
- Special Education District of Lake County
- *Springfield Public Schools
- Tazewell-Mason Counties Special Education Association
- *James Ward Elementary School
- West Suburban Association for the Hearing Handicapped
- *Williamson County Special Education District

INDIANA

- Ball State University
- Central Avenue School
- Deaf-Oral Nursery of the Rehabilitation Center, Evansville
- East Chicago Day Class for the Deaf
- *Floyd County Preschool Deaf Class
- Glenwood Elementary School
- *Hammond Public Schools
- *Hearing & Speech Center of St. Joseph's County, Inc.
- Indiana School for the Deaf
- Indiana University Medical Center
- Marion Community Schools
- *Michigan City Area Schools
- *Morrison-Mock School
- Oral Deaf Classes & Hearing Conservation Program, South Bend
- *Trade Winds Rehabilitation Center, Inc.

IOWA

- Black Hawk-Buchanan County Board of Education
- Cedar Rapids Community School
- *Dubuque County Schools
- Hope Haven School
- Iowa School for the Deaf
- Ottumwa Community School District
- Smouse Opportunity School
- Wilson School — Oral Deaf Department

*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

KANSAS

- Hays Regional Classroom for the Hard-of-Hearing
- *Hoisington Unified School District #431
- Institute of Logopedics, Inc.
- Kansas School for the Deaf
- Lawrence Unified School District 497 —
Grant School
- *Salina Public Schools
- *Speech & Hearing Clinic, Kansas State University
- *Topeka Public Schools
- *Mark Twain Elementary School
- University of Kansas Medical Center
- Wichita Public Schools

KENTUCKY

- Kentucky School for the Deaf
- Knox Central High School
- Lexington Deaf Oral School
- Louisville Deaf Oral Institute
- Louisville Public Schools
- *West Kentucky Easter Seal Center for Crippled
Children & Adults

LOUISIANA

- Acadia Parish School Board
- Delgado College
- Jefferson Parish School Board
- Lafayette Parish School Board
- Louisiana School for the Deaf
- Speech & Hearing Center of Southwest
Louisiana, Inc.
- State School for the Deaf — Southern Branch
- Sunset Acres School

MAINE

- Bangor Regional Speech & Hearing Center
- Governor Baxter State School for the Deaf
- Northeast Hearing & Speech Center, Inc.
- Pine Tree Society

MARYLAND

- William S. Baer School #301
- Baltimore County Department of Special
Education
- *Board of Education of Harford County
- Forest Park Senior High School
- Gateway Preschool
- Maryland School for the Deaf
- Montgomery County Public Schools
- *Pikesville Junior High School

- *Prince George's County Public Schools
- *Special Education Center, Hagerstown

MASSACHUSETTS

- *Belmont Public Schools
- Beverly School for the Deaf
- Boston School for the Deaf
- Peter Bulkeley School
- Clarke School for the Deaf
- *Communications Disorders Department, Frank-
lin County Public Hospital
- Day Class for Preschool Deaf, Lowell
- Sarah Fuller Foundation
- Habilitation Center for the Pre-School Hard-of-
Hearing & Deaf Children, Canton
- Haverhill Preschool Class for Deaf
- *Horatio A. Kempton School
- *Lawrence Primary Program for the Deaf
- *Leominster Day Classes for the Hearing Impaired
- *Horace Mann School for the Deaf
- Mercer School
- Myrtle Street School
- Page School
- Perkins School for Blind
- *Reading Day Class for Deaf
- *Willie Ross School for the Deaf
- Thayer-Lindsley Parent Centered Nursery
- Upsala Street School
- Waltham Public Schools
- Woburn Day Class Program
- *Worcester County Hearing & Speech Center

MICHIGAN

- *Allen Park Public Schools
- *Brighton Public Schools
- Howard D. Crull Intermediate School
- *Delta-Schoolcraft Intermediate School District
- Detroit Day School for Deaf
- Douglas School
- Durant-Tuuri-Mott School
- *Eastern Michigan University Speech & Hearing
Clinic
- Handley School
- Ida Public Schools
- Thomas Jefferson School
- *Kalamazoo Public Schools
- Ann J. Kellogg School
- *Lakeview Elementary School, Negaunee
- Lakeview Public Schools
- Lansing Public Schools

*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

Lapeer State Home & Training School
 John A. Lemmer School
 Lutheran School for the Deaf
 Marquette Elementary
 *Michigan School for the Deaf
 Michigan School for the Blind
 *Michigan State University Speech & Hearing Clinic
 Mott Foundation Children's Health Center
 Oakland Schools
 Preschool Physically Handicapped Program, Wyoming
 Public School Program for Deaf & Hard-of-Hearing, Jackson
 Redford Union Hard-of-Hearing Program
 Riverside Elementary School
 Shawnee Park Schools
 *Speech Clinic of the University of Michigan Medical School
 Tecumseh Public Schools
 Traverse City Public Schools
 Tri-County Preschool
 Utica Schools
 Warren Consolidated Schools
 *Wayne Community School District

MINNESOTA

*Anoka-Hennepin School District #11
 *Austin Public Schools
 Duluth Public Schools
 Lutheran High School
 Minneapolis Public Schools
 Minnesota School for the Deaf
 St. Paul Area Program for Impaired Hearing
 Technical Vocational Institute

MISSISSIPPI

*Mississippi School for the Deaf
 *Tupelo Regional Rehabilitation Center

MISSOURI

*Central Institute for the Deaf
 Delaware Elementary School
 *Gallaudet School for the Deaf
 Hearing & Speech Center, Kansas City
 Humboldt School
 Missouri School for the Deaf
 *Neosho Public Schools
 *North Kansas City Public Schools

St. Louis County Special School District for the Handicapped – Litzsinger School
 St. Louis University Speech & Hearing Clinic
 School District of Kansas City

MONTANA

Montana State School for the Deaf & Blind
 University of Montana Speech & Hearing Clinic

NEBRASKA

Nebraska School for the Deaf
 Omaha Hearing School for Children, Inc.
 *Omaha Public Schools
 Prescott Acoustically Handicapped Unit

NEVADA

Ruby Thomas Elementary School
 *Washoe County School District

NEW HAMPSHIRE

Crotched Mountain School for the Deaf
 *Easter Seal Rehabilitation Center of Greater Manchester
 Portsmouth Rehabilitation Center

NEW JERSEY

*American Institute for Mental Studies
 Avon School
 Bruce Street School
 Class for the Hard-of-Hearing, Kearny
 Clifton Public Schools
 *Cumberland County Public Schools
 Douglas Nursery for Hearing Handicapped
 Hackensack Program for the Deaf
 Helmbold Education Center
 Hunterdon Medical Center Nursery for Hearing Impaired Children
 *Marie H. Katzenbach School for the Deaf
 *The Midland School
 Millburn Avenue School
 Newark State College
 *North Jersey Training School
 *Speech & Hearing Center, Burlington County Memorial Hospital
 Summit Speech School
 Township Public Schools, Neptune
 Woodbridge Public School System

*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

NEW MEXICO

- *Albuquerque Hearing & Speech Center
- New Mexico School for the Deaf

NEW YORK

- Albany Medical Center Hospital
- Board of Cooperative Educational Services,
Nassau
- *Board of Cooperative Educational Services,
Suffolk County II
- *Board of Cooperative Educational Services,
Suffolk County III
- *Board of Cooperative Educational Services of
Washington, Warren, & Hamilton Counties
- *Buffalo Public Schools
- Catholic Charities Day Classes for Deaf Children
- Cerebral Palsy Preschool
- Children's Hospital & Rehabilitation Center
- *Demonstration Home Program, Rochester
- *Dutchess County Board of Cooperative
Educational Services
- *Erie County Board of Cooperative Educational
Services
- Grasslands Hospital
- *Alexander Hamilton School #31
- *Hebrew Institute for the Deaf
- Junior High 47-M School for Deaf
- *Meadowbrook Hospital Speech & Hearing Clinic
- *Mill Neck Manor Lutheran School for the Deaf
- New York Institute for the Education of the Blind
- New York School for the Deaf, White Plains
- New York State School for the Deaf, Rome
- *Queens College Speech & Hearing Center
- *Rensselaer County Board of Cooperative Educa-
tional Services
- Rochester School for the Deaf
- *St. Francis de Sales School for the Deaf
- St. Joseph's School for the Deaf
- St. Mary's School for the Deaf
- School for Language & Hearing Impaired
Children - Public School 158
- Suffolk School for Deaf Children
- Union-Endicott Central School District

NORTH CAROLINA

- Charlotte Speech & Hearing Center, Inc.
- Duke University Medical Center
- Eastern North Carolina School for the Deaf
- *Mecklenburg School - Department of Special
Education

- The Governor Morehead School
- North Carolina School for the Deaf
- Path School, Inc.

- *Wake County Preschool for the Hearing Impaired

NORTH DAKOTA

- Longfellow School
- *Minot State College Speech & Hearing Clinic
- North Dakota School for the Deaf
- University of North Dakota Speech & Hearing
Clinic

OHIO

- Akron Board of Education
- *Alexander Graham Bell School, Columbus
- Alexander Graham Bell School for the Deaf,
Cleveland
- Betty Jane Oral School
- Canton Public Schools
- Cincinnati Educational Center
- *Clark County Hearing & Speech Center
- *Cleveland Heights High School
- *Elyria City Schools
- Hearing & Speech Center of Columbus and
Central Ohio
- *Howard Day School for the Hearing Impaired
- *L.B. Kean Elementary School
- Kennedy School for the Deaf
- Kent Public Schools
- Kent State University
- Litchfield Rehabilitation Center
- *McKinley Elementary School
- Mansfield City Schools
- Millridge Center for Hearing Impaired
- Ohio School for the Deaf
- Program for Physically Handicapped, Toledo
- *St. Rita's School for the Deaf
- *Springfield City Schools
- Trumbull County Hearing Society
- Warren City Schools
- *Youngstown Public Schools
- Zanesville Classes for Deaf

OKLAHOMA

- Community Speech & Hearing Center, Enid
- Eastside School
- The Junior League Program for Children with
Hearing Losses
- *Kerr Junior High School

*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

Oklahoma City Public Schools
 *Oklahoma School for the Deaf
 University of Oklahoma Medical Center
 *Washington School

OREGON

Hearing and Speech Center, Eugene
 Oregon State School for the Deaf
 Portland Center for Hearing & Speech, Inc.
 Portland Public Schools
 Tucker-Maxon Oral School
 *Washington County Intermediate Education District

PENNSYLVANIA

Archbishop Ryan Memorial Institute for the Deaf
 De Paul Institute
 *Ebensburg State School and Hospital
 *Elwyn Institute
 Erie City School District
 *Home of the Merciful Saviour for Crippled Children
 Willis and Elizabeth Martin School
 *Pennhurst State School and Hospital
 Pennsylvania School for the Deaf
 Pennsylvania State Oral School for the Deaf
 *The Pittsburgh Hearing & Speech Society, Inc.
 Western Pennsylvania School for the Deaf
 Programs for Speech & Hearing Handicapped:
 Adams County Schools
 Allegheny County Schools
 Armstrong County Schools
 Beaver County Schools
 Bedford County Schools
 Berks County Schools
 Blair County Schools
 Bradford County Schools
 Bucks County Schools
 Butler County Schools
 Cambria County Schools
 Cameron County Schools
 Carbon County Schools
 Centre County Schools
 Chester County Schools
 Clarion County Schools
 Clinton County Schools
 Crawford County Schools
 Cumberland County Schools
 Dauphin County Schools
 Delaware County Schools
 Elk County Schools

Erie County Schools
 Fayette County Schools
 Franklin County Schools
 Fulton County Schools
 Greene County Schools
 Huntingdon County Schools
 Indiana County Schools
 Juniata County Schools
 Lackawanna County Schools
 Lancaster County Schools
 Lawrence County Schools
 Lebanon County Schools
 Luzerne County Schools
 Lycoming County Schools
 McKean County Schools
 Mercer County Schools
 Mifflin County Schools
 Monroe County Schools
 Montgomery County Schools
 Montour County Schools
 Northampton County Schools
 Northumberland County Schools
 Perry County Schools
 Pike County Schools
 Potter County Schools
 Schuylkill County Schools
 Snyder County Schools
 Somerset County Schools
 Sullivan County Schools
 Susquehanna County Schools
 Tioga County Schools
 Venango County Schools
 Warren County Schools
 Washington County Schools
 Westmoreland County Schools
 York County Schools

RHODE ISLAND

*Preschool Language Class at Meeting Street School
 *Rhode Island Hospital Hearing & Speech Center
 Rhode Island School for the Deaf
 *Windmill Hearing Therapy Program

SOUTH CAROLINA

Charleston County Schools
 *Estes Elementary School
 Florence County School District #3
 *Hearing and Speech Center, Columbia
 *Keowee Schools

*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

- *Parker House Education Center for Hearing Handicapped Children
- Pate Elementary School
- *Pee Dee Hearing & Speech Center
- *Spartanburg Speech & Hearing Clinic
- South Carolina School for the Deaf & Blind
- United Speech & Hearing Services

SOUTH DAKOTA

South Dakota School for the Deaf

TENNESSEE

- *Arlington State Hospital & School
- *Clover Bottom Hospital & School
- East Tennessee State University – Speech & Hearing Clinic
- *Green Valley Hospital & School
- Hamilton County Speech & Hearing Center
- *Knox County Public Schools
- Memphis City Schools
- Memphis Parents' School for Deaf & Aphasic
- Memphis Speech & Hearing Center
- Metropolitan Schools of Nashville & Davidson County
- Sunnyside School
- Tennessee School for the Deaf
- University of Tennessee – Preschool Deaf Program
- Bill Wilkerson Hearing & Speech Center

TEXAS

- *Abilene Public Schools – Day Class for the Deaf
- Amarillo Regional Hearing & Speech Center
- Austin Independent School District
- Baylor Speech & Hearing Clinic
- *Bi-County Deaf & Hard of Hearing School, Brownsville
- *Bexar County School for the Deaf
- P.F. Brown Elementary School
- The Callier Hearing & Speech Center
- Corpus Christi Independent School District
- County-Wide Area Day School, El Paso
- Dallas Independent School District
- Dallas Society for Crippled Children
- *Easter Seal Society for Crippled Children & Adults of Tarrant County, Inc.
- *Farias Special Education School
- Grayson County Crippled Children & Adult Center
- *Harlandale Independent School District

- Houston Independent School District
- Houston School for Deaf Children
- *Houston Speech & Hearing Center
- Helen Keller Special Education School
- *Midland Independent School District
- Multi-County School for the Deaf
- Pasadena Independent School District
- *Port Arthur Independent School District
- *Sunshine Cottage School for Deaf Children
- Tarrant County Day School for Deaf
- *Temple Memorial Treatment Center
- Texas Christian University Speech & Hearing Clinic
- Texas School for the Deaf
- Waco Independent School District
- Wichita Falls Independent School District

UTAH

- Brigham Young University – Communicative Disorders Clinic
- Utah Schools for the Deaf & Blind
- Utah State University – Edith Bowen Laboratory School

VERMONT

Austine School for the Deaf

VIRGINIA

- Arlington County Public Schools
- Blue Ridge Speech & Hearing Center, Inc.
- *Bristol Memorial Hospital Speech & Hearing Center
- *Charlottesville Public Schools
- *Chesterfield County Public Schools
- Diagnostic, Adjustive & Corrective Center for Learning
- Diagnostic Special Education School of Tidewater
- Rehabilitation Institute
- St. Paul's Oral School
- Virginia School for the Deaf & Blind
- Virginia State School for the Deaf at Hampton

WASHINGTON

- Bellingham School District #501
- *Bellevue Public Schools
- Bremerton School District 100-C
- *Edmonds School District #15
- Edna E. Davis School
- *Kent Public Schools
- *Northshore School District #417

*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

*Seattle Community College, Classes for the Deaf
 Seattle Public Schools
 *Shoreline School District #412
 University of Washington – Experimental
 Education Unit
 Washington State School for Blind
 Washington State School for the Deaf
 *Washington State University Speech & Hearing
 Clinic
 Yakima School District #7

WEST VIRGINIA

*Kanawha Hearing & Speech Center
 West Virginia School for the Deaf & the Blind

WISCONSIN

Bartlett School

Berryville School
 City District Public Schools, La Crosse
 Cooper Day School for Deaf
 Day School for Deaf, Wausau
 Madison Public Schools
 Milwaukee Hearing Society, Inc.
 *Oshkosh Program for Hearing Impaired Children
 *Pleasant Hill School
 *St. John's School for the Deaf
 School for the Deaf, Green Bay
 E.H. Wadewitz School
 *Washington School, Sheboygan
 Wisconsin School for the Deaf

WYOMING

Wyoming School for the Deaf

*Programs that joined the Survey during the 1970-71 school year. The other programs participated in the Survey during the 1969-70 school year.

REPORTS FROM THE ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN AND YOUTH

SERIES D

- No. 1 Academic Achievement Test Performance of Hearing Impaired Students—United States: Spring 1969
- No. 2 Item Analysis of Academic Achievement Tests Hearing Impaired Students—United States: Spring 1969
- No. 3 Additional Handicapping Conditions, Age at Onset of Hearing Loss, and Other Characteristics of Hearing Impaired Students—United States: 1968-69
- No. 4 Type and Size of Educational Programs Attended By Hearing Impaired Students—United States: 1968-69
- No. 5 Summary of Selected Characteristics of Hearing Impaired Students — United States: 1969-70